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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,306	01/12/2005	Monica Fernandez Gonzalez	53175	5212
26474	7590	06/05/2006	EXAMINER	
NOVAK DRUCE DELUCA & QUIGG, LLP 1300 EYE STREET NW SUITE 400 EAST TOWER WASHINGTON, DC 20005			WU, IVES J	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,306

Applicant(s)

FERNANDEZ GONZALEZ ET AL.

Examiner

Ives Wu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-17, 19-21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-17, 19-21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

(1). Applicants' Remarks and Amendments filed on March 21, 2006 and April 5, 2006 have been received and acknowledged.

Claims 1-13, 18 and 22 are cancelled.

The 30 months period based on the claimed priority date of December 27, 2002 is expired on June 27, 2004. The USPTO received date as stamped on transmittal letter to the United State is June 28, 2004. However, June 28, 2004 was Monday, therefore, rejections of claims 14-17, 19-21 and 23-25 in the prior Office Action dated on December 23, 2005 is withdrawn and a new ground of rejections for claims 14-17, 19-21 and 23-25 is presented herein.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

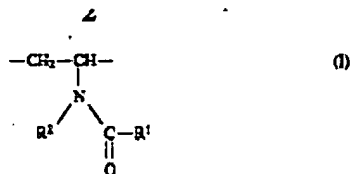
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

(2). **Claims 14-17, 19-21 and 23-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al (US005494535A) in view of Kucera (US006130289A).

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(3). As to the component A in the composition for treatment of metal surface in **independent claim 14**, Keller et al disclose an aqueous solution of the organic amino groups comprising units of the formula (I):



in which R¹ and R² are identical to or different from one another and are hydrogen or alkyl of 1 to 6 carbon atoms. (Col. 2, line 1-8).

Other suitable monomers are styrenesulfonic acid, diallylammonium chloride (Col. 3, line 19, 27).

As to the phenolic structural elements in **independent claim 14**, Keller et al do not disclose phenolic compound.

However, Kucera (US006130289A) disclose aqueous phenolic dispersion including phenolic compound comprising at least one hydroxyl functional group attached to a carbon atom of an aromatic ring (Col. 3, line 37-39). Illustrative phenolic compounds include unsubstituted phenol per se, substituted phenols such as alkylated phenols and multi-hydroxy phenols, and hydroxyl-substituted multi-ring aromatics. Illustrative alkylated phenols include methylphenol (also known as cresol), dimethylphenol (also known as xylenol). Illustrative multi-hydroxy phenols includes 1,3-benzenediol (also known as resorcinol), 1,2-benzenediol (also known as pyrocatechol) (Col. 3, line 37-50).

The advantage of using phenolic compound is to provide a cured film or coating on a substrate surface that exhibits superior environmental resistance and stable VOC free (Col 2, line 61-64).

Therefore, it would have been obvious at time the invention was made to include the phenolic compounds of Kucera in the aqueous composition of Keller et al in order to obtain the above-mentioned advantages.

As to the component B, water or another solvent in the composition in **independent claim 14**, Keller et al disclose aqueous solution (Abstract, line 2).

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(4). As to the components in **independent claim 15**, the disclosure of Keller et al and Kucera is incorporated herein by reference, the most subject matters of these components as claimed has been recited in applicants' claim 14, and has been discussed in the paragraph (3).

As to the deposition of metals or metal alloys on plastic surfaces in **independent claim 15**, the disclosure of Keller et al and Kucera meets the requirements of instant claim in terms of the materials added in the composition. It is reasonable to presume that the aqueous composition of prior art references would fulfill the utility for deposition of metals or metal alloys on plastics surface in light of their chemical similarities. The burden is shifted to applicants to establish that the composition of the presently claimed is not the same as or obvious as that set forth by the prior art reference.

As to the component D in **claim 16**, Keller et al disclose small amount of a heavy metal salt presented in these system (Col. 3, line 45-46).

As to the component E in **claim 16**, Keller et al disclose examples of suitable acids to be hydrochloric acid (Col. 3, line 63).

As to the component I in **claim 17**, Keller et al disclose magnesium oxide (Col. 2, line 64).

As to component K in **claim 17**, Keller et al disclose sodium carbonate (Col. 2, line 63).

As to the limitation of **claim 19**, Keller et al disclose the aqueous polymer solution advantageously applied by dipping, pouring and spraying (Col. 4, line 14-16).

As to the steps A, B in process in **claim 20**, Keller et al disclose the method is especially useful for treating iron, ferro-alloys and chemically pretreated substrates, such as metal surfaces which have been phosphated and possibly afterwashed with water (Col. 4, line 7-11).

As to the step E in process in **claim 20**, Keller et al disclose the cleaned or chemically pretreated metal surface being coated with a thin layer of a polymer which contains amino groups (Col. 1, line 45-48).

As to the limitation of **claim 21**, Keller et al disclose the organic polymers containing amino groups applied from aqueous solution, for example by pouring, spraying or dipping and then drying the modified metal surfaces (Col. 2, line 23-26).

As to the limitations of **claim 23 and 24**, Keller et al disclose the metal surfaces modified by the patentee's method offering a markedly improved protection against corrosion, especially

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after electrodeposition coating and in particular after coating by cathodic electrodeposition (Col. 2, line 13-16).

As to the component I in **claim 25**, Keller et al disclose magnesium oxide (Col. 2, line 64).

As to the component K in **claim 25**, Keller et al disclose examples of suitable acids to be carboxylic acid (Col. 3, line 60-61).

Response to Arguments

Applicant's arguments with respect to claims 14-17, 19-21 and 23-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ives Wu whose telephone number is 571-272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu

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Date: May 30, 2006



DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700